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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

|                        |                   |
|------------------------|-------------------|
| Application Number     | 10/084,043        |
| Filing Date            | February 27, 2002 |
| First Named Inventor   | Joseph A. Kwak    |
| Art Unit               | 2616              |
| Examiner Name          | Tsegaye, Saba     |
| Attorney Docket Number | I-2-0203.2US      |

**ENCLOSURES (Check all that apply)**

|   |   |   |
|---|---|---|
| <input type="checkbox"/> Fee Transmittal Form                             | <input type="checkbox"/> Drawing(s)   | <input type="checkbox"/> After Allowance Communication to TC                            |
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| <input type="checkbox"/> Amendment/Reply                                  | <input type="checkbox"/> Petition   | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final                                      | <input type="checkbox"/> Petition to Convert to a Provisional Application               | <input type="checkbox"/> Proprietary Information  |
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| <input type="checkbox"/> Extension of Time Request                        | <input type="checkbox"/> Terminal Disclaimer  | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):         |
| <input type="checkbox"/> Express Abandonment Request                      | <input type="checkbox"/> Request for Refund   | Form PTO-1449, Copy of European Search Report, and Six References Cited.                |
| <input checked="" type="checkbox"/> Information Disclosure Statement      | <input type="checkbox"/> CD, Number of CD(s) _____                                      |   |
|   | <input type="checkbox"/> Landscape Table on CD  |   |
| <input type="checkbox"/> Certified Copy of Priority Document(s)           | <b>Remarks</b>  |   |
| <input type="checkbox"/> Reply to Missing Parts/Incomplete Application    |   |   |
| <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 |   |   |

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

|              |                        |          |        |
|--------------|------------------------|----------|--------|
| Firm Name    | VOLPE AND KOENIG, P.C. |          |        |
| Signature    |                        |          |        |
| Printed name | Thomas A. Mattioli     |          |        |
| Date         | November 28, 2006      | Reg. No. | 56,773 |

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

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| Typed or printed name | Thomas A. Mattioli | Date | November 28, 2006 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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# PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

Joseph A. Kwak

**Application No.:** 10/084,043

**Confirmation No.:** 8075

**Filed:** February 27, 2002

**For:** METHOD FOR PHYSICAL LAYER  
AUTOMATIC REPEAT REQUEST FOR A  
BASE STATION

**Group:** 2616

**Examiner:** Tsegaye, Saba

**Our File:** I-2-0203.2US

**Date:** November 28, 2006

## INFORMATION DISCLOSURE STATEMENT INCLUDING RULE 1.704(d) STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Further to Applicant's Duty of Disclosure pursuant to 37 C.F.R. §1.56, Applicant wishes to bring to the Examiner's attention the material cited on the enclosed PTO-1449 form. Newly cited documents are indicated by an asterisk (\*). Copies of the cited documents are enclosed.

Pursuant to 37 C.F.R. § 1.97(e)(1), the undersigned certifies that each new item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application, copy enclosed, and that this communication was not received by any individual designated in §1.56(c) more than three (3) months prior to the filing of this Information Disclosure Statement.


Pursuant to 37 C.F.R. § 1.704(d), the undersigned certifies that each new item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application, copy enclosed, and that this communication was not received by any individual designated in § 1.56(c) more than thirty (30) days prior to the filing of this Information Disclosure Statement.

The source of the newly identified items of information is the enclosed communication from a foreign patent office in a counterpart application, dated November 3, 2006.

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the PTO-1449 form indicating his consideration of the cited materials.

Respectfully submitted,

Joseph A. Kwak

By   
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TAM/akg  
Enclosures ( 8 )



| FORM PTO-1449<br><br>U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE<br><br>INFORMATION DISCLOSURE<br>STATEMENT BY APPLICANT<br><br>(Use several sheets if necessary) |  |                 |         | ATTY. DOCKET NO.<br>I-2-0203.2US |       | SERIAL NO.<br>10/084,043 |                               |
|--|--|-----------------|---------|----------------------------------|-------|--------------------------|-------------------------------|
|  |  |                 |         | APPLICANT<br>Joseph A. Kwak      |       |                          |                               |
|  |  |                 |         | FILING DATE<br>February 27, 2002 |       | GROUP<br>2616            |                               |
| U.S. PATENT DOCUMENTS  |  |                 |         |                                  |       |                          |                               |
| EXAMINER<br>INITIAL  |  | DOCUMENT NUMBER | DATE    | NAME                             | CLASS | SUBCLASS                 | FILING DATE IF<br>APPROPRIATE |
|  |  | 4,912,705       | 03/1990 | Paneth et al.                    |       |                          |                               |
|  |  | 5,101,406       | 03/1992 | Messenger                        |       |                          |                               |
|  |  | 5,280,498       | 01/1994 | Tymes et al.                     |       |                          |                               |
|  |  | 5,345,439       | 09/1994 | Marston                          |       |                          |                               |
|  |  | 5,345,600       | 09/1994 | Davidson                         |       |                          |                               |
|  |  | 5,351,016       | 09/1994 | Dent                             |       |                          |                               |
|  |  | 5,544,196       | 08/1996 | Tiedemann, Jr. et al.            |       |                          |                               |
|  |  | 5,570,369       | 10/1996 | Jokinen                          |       |                          |                               |
|  |  | 5,648,969       | 07/1997 | Pasternak et al.                 |       |                          |                               |
|  |  | 5,657,325       | 08/1997 | Lou et al.                       |       |                          |                               |
|  |  | 5,715,260       | 02/1998 | Black et al.                     |       |                          |                               |
|  |  | 5,729,557       | 03/1998 | Gardner et al.                   |       |                          |                               |
|  |  | 5,828,677       | 10/1998 | Sayeed et al.                    |       |                          |                               |
|  |  | 5,838,267       | 11/1998 | Wang et al.                      |       |                          |                               |
|  |  | 5,918,156       | 06/1999 | Tanabe                           |       |                          |                               |
|  |  | 5,946,320       | 08/1999 | Decker                           |       |                          |                               |
|  |  | 5,956,624       | 09/1999 | Hunsinger et al.                 |       |                          |                               |
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|  |  | 5,983,383       | 11/1999 | Wolf                             |       |                          |                               |
|  |  | 5,983,384       | 11/1999 | Ross                             |       |                          |                               |
|  |  | 6,021,124       | 02/2000 | Haartsen                         |       |                          |                               |
|  |  | 6,049,549       | 04/2000 | Ganz et al.                      |       |                          |                               |
|  |  | 6,064,692       | 05/2000 | Chow                             |       |                          |                               |
|  |  | 6,128,276       | 10/2000 | Agee                             |       |                          |                               |
|  |  | 6,130,918       | 10/2000 | Humphrey et al                   |       |                          |                               |
| EXAMINER   |  |                 |         | DATE CONSIDERED                  |       |                          |                               |

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| <b>FORM PTO-1449</b><br><br><b>U.S. DEPARTMENT OF COMMERCE</b><br><b>PATENT AND TRADEMARK OFFICE</b><br><br><b>INFORMATION DISCLOSURE</b><br><b>STATEMENT BY APPLICANT</b><br><br>(Use several sheets if necessary) |  |                 |         | <b>ATTY. DOCKET NO.</b><br>I-2-0203.2US |       | <b>SERIAL NO.</b><br>10/084,043 |                               |
|---|--|-----------------|---------|---|-------|---------------------------------|-------------------------------|
|   |  |                 |         | <b>APPLICANT</b><br>Joseph A. Kwak      |       |                                 |                               |
|   |  |                 |         | <b>FILING DATE</b><br>February 27, 2002 |       | <b>GROUP</b><br>2616            |                               |
| <b>U.S. PATENT DOCUMENTS</b>  |  |                 |         |   |       |                                 |                               |
| EXAMINER<br>INITIAL   |  | DOCUMENT NUMBER | DATE    | NAME                                    | CLASS | SUBCLASS                        | FILING DATE IF<br>APPROPRIATE |
|   |  | 6,134,694       | 10/2000 | Uebayashi et al.                        |       |                                 |                               |
|   |  | 6,138,260       | 10/2000 | Ketseoglou                              |       |                                 |                               |
|   |  | 6,145,108       | 11/2000 | Ketseoglou                              |       |                                 |                               |
|   |  | 6,154,489       | 11/2000 | Kleider et al.                          |       |                                 |                               |
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|   |  | 2002/0037058    | 03/2002 | Birru                                   |       |                                 |                               |
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|   |  | 2002/0064167    | 05/2002 | Khan et al.                             |       |                                 |                               |
|   |  | 6,449,246       | 09/2002 | Barton et al.                           |       |                                 |                               |
|   |  | 6,470,391       | 10/2002 | Takamoto et al.                         |       |                                 |                               |
|   |  | 2002/0191544    | 12/2002 | Cheng et al.                            |       |                                 |                               |
|   |  | 6,522,650       | 02/2003 | Yonge et al.                            |       |                                 |                               |
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|                 |                        |
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|   |  |  |  | <b>FILING DATE</b><br>February 27, 2002 |  | <b>GROUP</b><br>2616            |  |

| U.S. PATENT DOCUMENTS |  |                 |         |                  |       |          |                               |
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| EXAMINER<br>INITIAL   |  | DOCUMENT NUMBER | DATE    | NAME             | CLASS | SUBCLASS | FILING DATE IF<br>APPROPRIATE |
|                       |  | 6,529,561       | 03/2003 | Sipola           |       |          |                               |
|                       |  | 6,587,985       | 07/2003 | Fukushima et al. |       |          |                               |
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|--------------------------|--|-----------------|---------|-----------------|-------|----------|-------------|----|
|                          |  | DOCUMENT NUMBER | DATE    | COUNTRY         | CLASS | SUBCLASS | TRANSLATION |    |
|                          |  |                 |         |                 |       |          | YES         | NO |
|                          |  | 1275279         | 02/1999 | CN <sup>1</sup> |       |          | X           |    |
|                          |  | 1277766         | 12/2000 | CN <sup>2</sup> |       |          |             | X  |
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|                          |  | 2002101733      | 08/2003 | RU              |       |          |             |    |

<sup>1</sup> corresponds to WO 99/09698    <sup>2</sup> corresponds to WO 99/12303

\*\* Abstract Only

|                 |                        |
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|  |   |   |         | FILING DATE<br>February 27, 2002 |       | GROUP<br>2616            |                       |
| FOREIGN PATENT DOCUMENTS   |   |   |         |                                  |       |                          |                       |
|  |   | DOCUMENT NUMBER   | DATE    | COUNTRY                          | CLASS | SUBCLASS                 | TRANSLATION<br>YES NO |
|  |   | 2221338   | 01/2004 | RU                               |       |                          |                       |
|  |   | 2221339   | 01/2004 | RU                               |       |                          |                       |
|  |   | 2235432   | 08/2004 | RU                               |       |                          |                       |
|  | * | 0797327   | 09/1997 | EP                               |       |                          |                       |
|  | * | 0859475   | 08/1998 | EP                               |       |                          |                       |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)   |   |   |         |                                  |       |                          |                       |
|  |   | "Hybrid ARQ Methods for FDD in Release in 2000," TSG-RAN Working Group 1 Meeting #14, Oulu, Finland, July 4-7, 2000.  |         |                                  |       |                          |                       |
|  |   | "Physical Layer Aspects of UTRA High Speed Downlink Packet Access," 3GPP TR 25.848 V4.0.0 (2001-03), pp. 1-89.  |         |                                  |       |                          |                       |
|  |   | Rohling, Hermann et al. "Performance Comparison of Different Multiple Access Schemes for the Downlink of an OFDM Communication System", 1997 IEEE 47 <sup>th</sup> Vehicular Technology Conference, May 1997, vol. 3, p. 1368.  |         |                                  |       |                          |                       |
|  |   | 3GPP TR 25.848 V4.0.0 (2001-03), 3 <sup>rd</sup> Generation Partnership Project; Technical Specification Group Radio Access Network; Physical layer aspects of UTRA High Speed Downlink Packet Access (Release 4), p. 50.   |         |                                  |       |                          |                       |
|  | * | Eriksson et al. "Comparison of Link Quality Control Strategies for Packet Data Services in EDGE." Vehicular Technology Conference, 1999 IEEE. May 16, 1999, pp. 938-942.  |         |                                  |       |                          |                       |
|  | * | Sayeed, "Throughput Analysis and Design of Fixed and Adaptive ARQ/Diversity Systems for Slow Fading Channels." Global Telecommunications Conference, 1998. November 8, 1998, pp. 3686-3691.   |         |                                  |       |                          |                       |
|  | * | Shiozaki et al. "A Hybrid ARQ Scheme With Adaptive Forward Error Correction for Satellite Communications." IEEE Transactions on Communications, April 1, 1991, pp. 482-484.   |         |                                  |       |                          |                       |
|  | * | Bakhtiyari et al. "Practical Implementation of a Mobile Data Link Protocol With A Type II Hybrid ARQ Scheme and Code Combining." Personal Communication – Freedom Through Wireless Technology. Proceedings of the Vehicular Technology Conference, May 18, 1993, pp. 774-777. |         |                                  |       |                          |                       |
| EXAMINER   |   |   |         | DATE CONSIDERED                  |       |                          |                       |

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